

**Pre-Installation Checklists for Side-Coupled Cavities**

**R. Noble  
May 3, 1993**

**Attached are the completed pre-installation checklists for the side-coupled cavities as installed in March 1992 in the temporary positions.**

## MODULE PRE-INSTALLATION CHECK LIST, MECHANICAL

MODULE NUMBER Trans.

INITIAL & DATE

### BRIDGE COUPLERS

1. CLEANED & PAINTED CLEAR
2. FLANGES LAPPED & COVERED
3. ION PUMP ON CENTER BRIDGE COUPLER
4. WINDOW ASSEMBLY ON CENTER BRIDGE COUPLER
5. BLANK OFF ION PUMP PORTS ON END BRIDGE COUPLERS

RZ 3/9/92  
RZ 3/9/92  
RZ 3/9/92  
RZ 3/9/92  
NA

### CAVITIES & GIRDER

1. REMOVE ION GAUGES FROM CONDITIONING CONFIGURATION
2. REMOVE BRIDGE COUPLERS & BLANK OFF CAVITY FLANGES
3. REMOVE BEAM TUBES & BLANK OFF B.T. FLANGES  
(USE HELIOCOFLEX SEALS & WIREBRUSH HANDLES)
4. INSTALL ION GAUGE ON CENTER OF SECTION #  
(INSTALL NEW ION GAUGE PROTECTOR)
5. INSTALL QUADS
6. SNUG DOWN ALL CAVITY "Z" ADJUSTERS
7. INSTALL ALUMINUM HOLD DOWN BAR ON EACH CAVITY
8. PURGE & BACKFILL WITH DRY NITROGEN
9. REMOVE GIRDER STANDS
10. QUAD WATER MANIFOLD

RZ 3/9/92  
RZ 3/9/92  
RZ 3/9/92  
RZ 3/9/92

RZ 3/9/92  
RZ 3/9/92  
RZ 3/9/92  
RZ 3/9/92

## CHECK LIST, ELECTRICAL

1. HIGH POWER TESTING IS COMPLETE
2. VERIFY FINAL TUNING IS COMPLETED & BEAM  
LOADING SLOT IS CORRECT
3. MODE MEASUREMENTS ARE IN LOGBOOK
4. BEAD-PULL DATA IS IN LOG BOOK
5. VERIFY THAT PHASE BALANCE HAS BEEN MADE
6. PROBES ARE CALIBRATED TO -57 db (TARGET VALUE) &  
ACTUAL CALIBRATION IS LISTED IN THE LOGBOOK  
PROBE TYPE: TEFLON\_\_\_\_, GLASS SEALED ☒  
BRIDGE COUPLERS MAY BE REMOVED
7. ALL ACCELERATING FIELD MONITOR CABLES ARE INSTALLED
8. INSTALLED 8-WAY COMBINER & PADS
9. IF POSSIBLE, MEASURE MODULE UNDER VACUUM

RPD  
RPD  
RPD  
RPD  
RPD  
RPD

RPD  
RPD  
N/A for

## MODULE PRE-INSTALLATION CHECK LIST, MECHANICAL

MODULE NUMBER 1

INITIAL & DATE

### BRIDGE COUPLERS

1. CLEANED & PAINTED CLEAR
2. FLANGES LAPPED & COVERED
3. ION PUMP ON CENTER BRIDGE COUPLER
4. WINDOW ASSEMBLY ON CENTER BRIDGE COUPLER
5. BLANK OFF ION PUMP PORTS ON END BRIDGE COUPLERS

J.D.H. 2/27/92  
R.P.D.  
J.D.H. 2/27/92  
J.D.H. 2/27/92  
J.D.H. 2/27/92

### CAVITIES & GIRDER

1. REMOVE ION GAUGES FROM CONDITIONING CONFIGURATION
2. REMOVE BRIDGE COUPLERS & BLANK OFF CAVITY FLANGES
3. REMOVE BEAM TUBES & BLANK OFF B.T. FLANGES  
(USE HELIOCOFLEX SEALS & WIREBRUSH HANDLES)
4. INSTALL ION GAUGE ON CENTER OF SECTION 3  
(INSTALL NEW ION GAUGE PROTECTOR)
5. INSTALL QUADS
6. SNUG DOWN ALL CAVITY "Z" ADJUSTERS
7. INSTALL ALUMINUM HOLD DOWN BAR ON EACH CAVITY
8. PURGE & BACKFILL WITH DRY NITROGEN
9. REMOVE GIRDER STANDS
10. QUAD WATER MANIFOLD

D.J.H. 3/2/92  
D.J.H. 3/2/92  
D.J.H. 3/2/92  
D.J.H. 3/2/92  
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D.J.H. 3/2/92  
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## CHECK LIST, ELECTRICAL

1. HIGH POWER TESTING IS COMPLETE
2. VERIFY FINAL TUNING IS COMPLETED & BEAM  
LOADING SLOT IS CORRECT
3. MODE MEASUREMENTS ARE IN LOGBOOK
4. BEAD-PULL DATA IS IN LOG BOOK
5. VERIFY THAT PHASE BALANCE HAS BEEN MADE
6. PROBES ARE CALIBRATED TO -57 db (TARGET VALUE) &  
ACTUAL CALIBRATION IS LISTED IN THE LOGBOOK  
PROBE TYPE: TEFLON ✓, GLASS SEALED \_\_\_\_\_  
BRIDGE COUPLERS MAY BE REMOVED
7. ALL ACCELERATING FIELD MONITOR CABLES ARE INSTALLED
8. INSTALLED 8-WAY COMBINER & PADS
9. IF POSSIBLE, MEASURE MODULE UNDER VACUUM

Ric. Padilla  
R.P.D.  
R.P.D.  
R.P.D.  
R.P.D.  
RAZ  
RAZ  
RAZ  
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\_\_\_\_\_

## MODULE PRE-INSTALLATION CHECK LIST, MECHANICAL

MODULE NUMBER 2

INITIAL & DATE

### BRIDGE COUPLERS

1. CLEANED & PAINTED CLEAR
2. FLANGES LAPPED & COVERED
3. ION PUMP ON CENTER BRIDGE COUPLER
4. WINDOW ASSEMBLY ON CENTER BRIDGE COUPLER
5. BLANK OFF ION PUMP PORTS ON END BRIDGE COUPLERS

QAW 2/27/92  
RZ 3/1/92  
QAW 2/27/92  
QAW 2/27/92  
QAW 2/27/92

### CAVITIES & GIRDER

1. REMOVE ION GAUGES FROM CONDITIONING CONFIGURATION
2. REMOVE BRIDGE COUPLERS & BLANK OFF CAVITY FLANGES
3. REMOVE BEAM TUBES & BLANK OFF B.T. FLANGES  
(USE HELIOCOFLEX SEALS & WIREBRUSH HANDLES)
4. INSTALL ION GAUGE ON CENTER OF SECTION 3  
(INSTALL NEW ION GAUGE PROTECTOR)
5. INSTALL QUADS
6. SNUG DOWN ALL CAVITY "Z" ADJUSTERS
7. INSTALL ALUMINUM HOLD DOWN BAR ON EACH CAVITY
8. PURGE & BACKFILL WITH DRY NITROGEN
9. REMOVE GIRDER STANDS
10. QUAD WATER MANIFOLD

D.J.H. 3/2/92  
D.J.H. 3/2/92  
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D.J.H. 3/2/92

D.J.H. 3/2/92  
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D.J.H. 3/2/92  
D.J.H. 3/2/92

## CHECK LIST, ELECTRICAL

1. HIGH POWER TESTING IS COMPLETE
2. VERIFY FINAL TUNING IS COMPLETED & BEAM  
LOADING SLOT IS CORRECT
3. MODE MEASUREMENTS ARE IN LOGBOOK
4. BEAD-PULL DATA IS IN LOG BOOK
5. VERIFY THAT PHASE BALANCE HAS BEEN MADE
6. PROBES ARE CALIBRATED TO -57 db (TARGET VALUE) &  
ACTUAL CALIBRATION IS LISTED IN THE LOGBOOK  
PROBE TYPE: TEFLON ☒, GLASS SEALED ☐  
**BRIDGE COUPLERS MAY BE REMOVED**
7. ALL ACCELERATING FIELD MONITOR CABLES ARE INSTALLED
8. INSTALLED 8-WAY COMBINER & PADS
9. IF POSSIBLE, MEASURE MODULE UNDER VACUUM

RPD  
RPD  
RPD  
RPD  
N/A ok Hwn  
RAZ  
RAZ  
RAZ  
N/A Hwn

## MODULE PRE-INSTALLATION CHECK LIST, MECHANICAL

MODULE NUMBER 3

INITIAL & DATE

### BRIDGE COUPLERS

1. CLEANED & PAINTED CLEAR
2. FLANGES LAPPED & COVERED
3. ION PUMP ON CENTER BRIDGE COUPLER
4. WINDOW ASSEMBLY ON CENTER BRIDGE COUPLER
5. BLANK OFF ION PUMP PORTS ON END BRIDGE COUPLERS

*R.P.* 3/10/92  
*R.P.* 3/10/92  
*R.P.* 3/10/92  
*R.P.* 3/10/92  
*R.P.* 3/10/92

### CAVITIES & GIRDER

1. REMOVE ION GAUGES FROM CONDITIONING CONFIGURATION
2. REMOVE BRIDGE COUPLERS & BLANK OFF CAVITY FLANGES
3. REMOVE BEAM TUBES & BLANK OFF B.T. FLANGES  
(USE HELIOCOFLEX SEALS & WIREBRUSH HANDLES)
4. INSTALL ION GAUGE ON CENTER OF SECTION 3  
(INSTALL NEW ION GAUGE PROTECTOR)
5. INSTALL QUADS
6. SNUG DOWN ALL CAVITY "Z" ADJUSTERS
7. INSTALL ALUMINUM HOLD DOWN BAR ON EACH CAVITY
8. PURGE & BACKFILL WITH DRY NITROGEN
9. REMOVE GIRDER STANDS
10. QUAD WATER MANIFOLD

*D.S.H.* 3/2/92  
*D.S.H.* 3/2/92  
*D.S.H.* 3/2/92  
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*D.S.H.* 3/2/92

### CHECK LIST, ELECTRICAL

1. HIGH POWER TESTING IS COMPLETE
2. VERIFY FINAL TUNING IS COMPLETED & BEAM  
LOADING SLOT IS CORRECT
3. MODE MEASUREMENTS ARE IN LOGBOOK
4. BEAD-PULL DATA IS IN LOG BOOK
5. VERIFY THAT PHASE BALANCE HAS BEEN MADE
6. PROBES ARE CALIBRATED TO -57 db (TARGET VALUE) &  
ACTUAL CALIBRATION IS LISTED IN THE LOGBOOK  
PROBE TYPE: TEFLON ✓, GLASS SEALED \_\_\_\_\_  
*BRIDGE COUPLERS MAY BE REMOVED*
7. ALL ACCELERATING FIELD MONITOR CABLES ARE INSTALLED
8. INSTALLED 8-WAY COMBINER & PADS
9. IF POSSIBLE, MEASURE MODULE UNDER VACUUM

*R.P.*  
*R.P.*  
*R.P.*  
*R.P.*  
*R.P.*  
*RAZ*  
*RAZ*  
*RAZ*  
*N/A at LWR*

## BRIDGE COUPLERS

## MODULE PRE-INSTALLATION CHECK LIST, MECHANICAL

MODULE NUMBER 5

INITIAL & DATE

### BRIDGE COUPLERS

1. CLEANED & PAINTED CLEAR
2. FLANGES LAPPED & COVERED
3. ION PUMP ON CENTER BRIDGE COUPLER
4. WINDOW ASSEMBLY ON CENTER BRIDGE COUPLER
5. BLANK OFF ION PUMP PORTS ON END BRIDGE COUPLERS

RL 3/10/92  
RL 3/10/92  
RL 3/10/92  
RL 3/10/92  
RL 3/10/92  
RL 3/10/92

### CAVITIES & GIRDER

1. REMOVE ION GAUGES FROM CONDITIONING CONFIGURATION
2. REMOVE BRIDGE COUPLERS & BLANK OFF CAVITY FLANGES
3. REMOVE BEAM TUBES & BLANK OFF B.T. FLANGES  
(USE HELIOCOFLEX SEALS & WIREBRUSH HANDLES)
4. INSTALL ION GAUGE ON CENTER OF SECTION 3  
(INSTALL NEW ION GAUGE PROTECTOR)
5. INSTALL QUADS
6. SNUG DOWN ALL CAVITY "Z" ADJUSTERS
7. INSTALL ALUMINUM HOLD DOWN BAR ON EACH CAVITY
8. PURGE & BACKFILL WITH DRY NITROGEN
9. REMOVE GIRDER STANDS
10. QUAD WATER MANIFOLD

D.J.H. 3/3/92  
D.J.H. 3/3/92  
D.S.H. 3/3/92  
D.J.H. 3/3/92  
D.S.H. 3/3/92  
D.J.H. 3/3/92  
D.S.H. 3/3/92  
D.J.H. 3/3/92  
D.S.H. 3/3/92  
D.J.H. 3/3/92

## CHECK LIST, ELECTRICAL

1. HIGH POWER TESTING IS COMPLETE
2. VERIFY FINAL TUNING IS COMPLETED & BEAM  
LOADING SLOT IS CORRECT
3. MODE MEASUREMENTS ARE IN LOGBOOK
4. BEAD-PULL DATA IS IN LOG BOOK
5. VERIFY THAT PHASE BALANCE HAS BEEN MADE
6. PROBES ARE CALIBRATED TO -57 db (TARGET VALUE) &  
ACTUAL CALIBRATION IS LISTED IN THE LOGBOOK  
PROBE TYPE: TEFLON\_\_\_\_, GLASS SEALED ☒  
BRIDGE COUPLERS MAY BE REMOVED
7. ALL ACCELERATING FIELD MONITOR CABLES ARE INSTALLED
8. INSTALLED 8-WAY COMBINER & PADS
9. IF POSSIBLE, MEASURE MODULE UNDER VACUUM

RPD  
RPD  
RPD  
RPD  
N/A ok Hwn  
RAZ  
RAZ  
RAZ  
N/A ok Hwn

## MODULE PRE-INSTALLATION CHECK LIST, MECHANICAL

MODULE NUMBER 6

INITIAL & DATE

### BRIDGE COUPLERS

1. CLEANED & PAINTED CLEAR
2. FLANGES LAPPED & COVERED
3. ION PUMP ON CENTER BRIDGE COUPLER
4. WINDOW ASSEMBLY ON CENTER BRIDGE COUPLER
5. BLANK OFF ION PUMP PORTS ON END BRIDGE COUPLERS

RL 3/10/92  
RL 3/10/92  
RL 3/10/92  
RL 3/10/92  
RL 3/10/92

### CAVITIES & GIRDER

1. REMOVE ION GAUGES FROM CONDITIONING CONFIGURATION
2. REMOVE BRIDGE COUPLERS & BLANK OFF CAVITY FLANGES
3. REMOVE BEAM TUBES & BLANK OFF B.T. FLANGES  
(USE HELIOCOFLEX SEALS & WIREBRUSH HANDLES)
4. INSTALL ION GAUGE ON CENTER OF SECTION 3  
(INSTALL NEW ION GAUGE PROTECTOR)
5. INSTALL QUADS
6. SNUG DOWN ALL CAVITY "Z" ADJUSTERS
7. INSTALL ALUMINUM HOLD DOWN BAR ON EACH CAVITY
8. PURGE & BACKFILL WITH DRY NITROGEN
9. REMOVE GIRDER STANDS
10. QUAD WATER MANIFOLD

RL 3/10/92  
RL 3/10/92  
RL 3/10/92  
RL 3/10/92

RL 3/10/92  
RL 3/10/92  
RL 3/11/92

## CHECK LIST, ELECTRICAL

1. HIGH POWER TESTING IS COMPLETE
2. VERIFY FINAL TUNING IS COMPLETED & BEAM  
LOADING SLOT IS CORRECT
3. MODE MEASUREMENTS ARE IN LOGBOOK
4. BEAD-PULL DATA IS IN LOG BOOK
5. VERIFY THAT PHASE BALANCE HAS BEEN MADE
6. PROBES ARE CALIBRATED TO -57 db (TARGET VALUE) &  
ACTUAL CALIBRATION IS LISTED IN THE LOGBOOK  
PROBE TYPE: TEFLON\_\_\_\_, GLASS SEALED ✓  
BRIDGE COUPLERS MAY BE REMOVED
7. ALL ACCELERATING FIELD MONITOR CABLES ARE INSTALLED
8. INSTALLED 8-WAY COMBINER & PADS
9. IF POSSIBLE, MEASURE MODULE UNDER VACUUM

LD  
RPD  
RPD  
RPD  
RPD  
RPD  
RPD  
RPD  
RPD

NOTE: 6-4 VS probe rotated 180° after conditioning



## MODULE PRE-INSTALLATION CHECK LIST, MECHANICAL

MODULE NUMBER 7

INITIAL & DATE

### BRIDGE COUPLERS

1. CLEANED & PAINTED CLEAR
2. FLANGES LAPPED & COVERED
3. ION PUMP ON CENTER BRIDGE COUPLER
4. WINDOW ASSEMBLY ON CENTER BRIDGE COUPLER
5. BLANK OFF ION PUMP PORTS ON END BRIDGE COUPLERS

RL  
RL  
RL  
RL  
RL  
RL

### CAVITIES & GIRDER

1. REMOVE ION GAUGES FROM CONDITIONING CONFIGURATION
2. REMOVE BRIDGE COUPLERS & BLANK OFF CAVITY FLANGES
3. REMOVE BEAM TUBES & BLANK OFF B.T. FLANGES  
(USE HELIOCOFLEX SEALS & WIREBRUSH HANDLES)
4. INSTALL ION GAUGE ON CENTER OF SECTION 3  
(INSTALL NEW ION GAUGE PROTECTOR)
5. INSTALL QUADS
6. SNUG DOWN ALL CAVITY "Z" ADJUSTERS
7. INSTALL ALUMINUM HOLD DOWN BAR ON EACH CAVITY
8. PURGE & BACKFILL WITH DRY NITROGEN
9. REMOVE GIRDER STANDS
10. QUAD WATER MANIFOLD

RL  
RL  
RL

RL  
RL  
RL  
RL

### CHECK LIST, ELECTRICAL

1. HIGH POWER TESTING IS COMPLETE
2. VERIFY FINAL TUNING IS COMPLETED & BEAM  
LOADING SLOT IS CORRECT
3. MODE MEASUREMENTS ARE IN LOGBOOK
4. BEAD-PULL DATA IS IN LOG BOOK
5. VERIFY THAT PHASE BALANCE HAS BEEN MADE
6. PROBES ARE CALIBRATED TO -57 db (TARGET VALUE) &  
ACTUAL CALIBRATION IS LISTED IN THE LOGBOOK  
PROBE TYPE: TEFLON\_\_\_\_, GLASS SEALED ☒  
BRIDGE COUPLERS MAY BE REMOVED
7. ALL ACCELERATING FIELD MONITOR CABLES ARE INSTALLED
8. INSTALLED 8-WAY COMBINER & PADS
9. IF POSSIBLE, MEASURE MODULE UNDER VACUUM

RL

RL  
RL  
RL  
RL

RL

RL  
RL